

Publications before 2000

More Recent Publications

1999:

1. B. Braune, S. Diehl, A. Kerren, and R. Wilhelm.
Animation of the Generation and Computation of Finite Automata for Learning Software.
In *Automata Implementation, Proceedings of the 4th International Workshop on Implementing Automata (WIA '99)*, volume 2214 of *Lecture Notes on Computer Science, LNCS*, pages 39-47, Potsdam, 1999. Springer.
([web page at Springer](#), [PDF-file](#) © Springer).
2. P. Eades and P. Mutzel.
Graph drawing algorithms.
In M. Atallah, editor, *CRC Handbook of Algorithms and Theory of Computation*, chapter 9, pages 9-1-9-26. CRC Press, 1999.
3. J. Gottlieb and G. R. Raidl.
Characterizing locality in decoder-based EAs for the multidimensional knapsack problem.
In C. Fonlupt et al., editors, *Proceedings of Artificial Evolution: Fourth European Conference*, volume 1829 of *LNCS*, pages 38-52. Springer, 1999.
([PDF-file](#)).
4. C. Gutwenger.
Design und Implementierung einer Algorithmen-Bibliothek zum Zeichnen von Graphen.
Master's thesis, Diplomarbeit, Universität des Saarlandes, Saarbrücken, Germany, 1999.
5. A. Kerren.
Animation der semantischen Analyse.
In *Tagungsband zur 8. GI Fachtagung Informatik und Schule (INFOS '99)*, Informatik aktuell, pages 108-120. Springer, 1999.
([web page at Springer](#), [PDF-file](#) © Springer).
6. G. W. Klau and P. Mutzel.
Combining graph labeling and compaction.
In J. Kratochvíl, editor, *Proc. 8th Internat. Symp. on Graph Drawing (GD '99)*, volume 1731, pages 27-37, Štířín Castle, Czech Republic, Sept. 1999. Springer-Verlag.
7. G. W. Klau and P. Mutzel.
Optimal compaction of orthogonal grid drawings.
In G. P. Cornuéjols, R. E. Burkard, and G. J. Woeginger, editors; *Integer Programming and Combinatorial Optimization (IPCO '99)*, volume 1610, pages 304-319, Graz, Austria, June 1999. Springer-Verlag.
8. G. W. Klau and P. Mutzel.
Optimal compaction of orthogonal grid drawings.

In G. P. Cornuejols, editor, *Integer Programming and Combinatorial Optimization (Proc. IPCO '99)*, volume 1610 of *Lecture Notes in Computer Science*, pages 304-319. Springer-Verlag, 1999.

9. D. Lütke-Hüttmann.
Knickminimales zeichnen 4-planarer clustergraphen.
Master's thesis, Universität des Saarlandes, Saarbrücken, Germany, 1999.
10. P. Mutzel and R. Weiskircher.
Optimizing over all combinatorial embeddings of a planar graph.
In G. P. Cornuejols, editor, *Integer Programming and Combinatorial Optimization (Proc. IPCO '99)*, volume 1610 of *Lecture Notes in Computer Science*, pages 361-376. Springer-Verlag, 1999.
11. P. Mutzel and R. Weiskircher.
Optimizing over all combinatorial embeddings of a planar graph.
In G. Cornuejols, R. Burkard, and G. Wöginger, editors, *Proceedings of the Seventh Conference on Integer Programming and Combinatorial Optimization (IPCO)*, volume 1610 of *LNCS*, pages 361-376. Springer Verlag, 1999.
([PDF-file](#)).
12. P. Mutzel and T. Ziegler.
The constrained crossing minimization problem.
In J. Kratochvíl, editor, *Graph Drawing (Proc. GD '99)*, volume 1731 of *Lecture Notes in Computer Science*, pages 175-185. Springer-Verlag, 1999.
13. P. Mutzel and T. Ziegler.
The constrained crossing minimization problem - a first approach.
In P. Kall and H.-J. Lüthi, editors, *Operations Research Proceedings 1998*, pages 125-134. Springer-Verlag, 1999.
14. G. R. Raidl.
An evolutionary approach to point-feature label placement.
In W. Banzhaf et al., editors, *Proceedings of the 1999 Genetic and Evolutionary Computation Conference*, page 807. Morgan Kaufmann, 1999.
short paper.
([PDF-file](#)).
15. G. R. Raidl.
The multiple container packing problem: A genetic algorithm approach with weighted codings.
ACM SIGAPP Applied Computing Review, 7(2):22-31, 1999.
([PDF-file](#)).
16. G. R. Raidl.
A weight-coded genetic algorithm for the multiple container packing problem.
In J. Carroll et al., editors, *Proceedings of the 1999 ACM Symposium on Applied Computing*, pages 291-296. ACM Press, 1999.
([PDF-file](#)).
17. G. R. Raidl.

Weight-codings in a genetic algorithm for the multiconstraint knapsack problem.

In P. J. Angeline et al., editors, *Proceedings of the 1999 IEEE Congress on Evolutionary Computation*, pages 596-603. IEEE Press, 1999.

(PDF-file).

18. G. R. Raidl and J. Gottlieb.

On the importance of phenotypic duplicate elimination in decoder-based evolutionary algorithms.

In S. Brave and A. S. Wu, editors, *Late Breaking Papers at the 1999 Genetic and Evolutionary Computation Conference*, pages 204-211, Orlando, FL, 1999.

(PDF-file).

1998:

1. AGD.

AGD User Manual.

Max-Planck-Institut Saarbrücken, Universität Halle, Universität Köln, 1998.

Available via ``<http://www.mpi-sb.mpg.de/AGD/>". Partially supported by the DFG-cluster ``Effiziente Algorithmen für diskrete Probleme und ihre Anwendungen".

2. H. R. Arabnia, P.-C. Chung, J. B. Farison, G. R. Raidl, M. Sarfraz, and Z. Zhang, editors.
Proceedings of the International Conference on Imaging Science, Systems, and Technology.
CSREA Press, 1998.

3. T. Biedl, M. Kaufmann, and P. Mutzel.

Drawing planar partitions ii: Hh-drawings.

In J. Hromkovic and O. Sykora, editors, *Proceedings of the 24-th Workshop on Graph-Theoretic Concepts in Computer Science (WG '98)*, volume 1517 of *Lecture Notes in Computer Science*, pages 124-136. Springer-Verlag, 1998.

4. P. Eades, J. Marks, P. Mutzel, and S. North.

Graph drawing contest report.

In S. Whitesides, editor, *Graph Drawing, 6th International Symposium, GD '98*, volume 1547 of *Lecture Notes in Computer Science*, pages 423-435. Springer-Verlag, 1998.

5. S. Fialko and P. Mutzel.

A new approximation algorithm for the planar augmentation problem.

In *Proceedings of the Ninth Annual ACM-SIAM Symposium on Discrete Algorithms (SODA '98)*, pages 260-269, San Francisco, California, 1998. ACM Press.

6. C. Gutwenger and P. Mutzel.

Planar polyline drawings with good angular resolution.

In S. Whitesides, editor, *Graph Drawing, 6th International Symposium, GD '98*, volume 1547 of *Lecture Notes in Computer Science*, pages 167-182. Springer-Verlag, 1998.

7. M. Jünger, S. Leipert, and P. Mutzel.

Level planarity testing in linear time.

In S. Whitesides, editor, *Graph Drawing, 6th International Symposium, GD '98*, volume 1547 of *Lecture Notes in Computer Science*, pages 224-237. Springer-Verlag, 1998.

8. M. Jünger, S. Leipert, and P. Mutzel.
A note on computing a maximal planar subgraph using PQ-trees.
IEEE Transactions on Computer-Aided Design, 17(7), 1998.
9. M. Jünger, P. Mutzel, T. Odenthal, and M. Scharbrodt.
The thickness of a minor-excluded class of graphs.
Discrete Mathematics, 182:169-176, 1998.
10. G. W. Klau and P. Mutzel.
Quasi-orthogonal drawing of planar graphs.
Technical Report MPI-I-98-1-013, Max-Planck-Institut für Informatik, Saarbrücken, 1998.
11. S. Leipert.
Level Planarity Testing and Embedding in Linear Time.
PhD thesis, Institut für Informatik, Universität zu Köln, 1998.
12. P. Mutzel.
A $\frac{3}{2}$ approximation algorithm for the planar augmentation problem.
Extended Abstract, 1998.
13. P. Mutzel.
New algorithms for the planar augmentation problem.
slides available via <http://www.mpi-sb.mpg.de/wae98/>, 1998.
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14. P. Mutzel and R. Brockenauer.
Straightline planar graph drawing.
Video, 1998.
15. P. Mutzel and S. Fialko.
New approximation algorithms for planar augmentation.
Extended Abstract, to appear, 1998.
16. P. Mutzel, C. Gutwenger, R. Brockenauer, S. Fialko, G. Klau, M. Krüger, T. Ziegler, S. Näher, D. Alberts, D. Ambras, G. Koch, M. Jünger, C. Buchheim, and S. Leipert.
AGD: A library of Algorithms for Graph Drawing (poster-abstract).
In S. Whitesides, editor, *Graph Drawing, 6th International Symposium, GD '98*, volume 1547 of *Lecture Notes in Computer Science*, pages 456-457. Springer-Verlag, 1998.
17. P. Mutzel, C. Gutwenger, R. Brockenauer, S. Fialko, G. W. Klau, M. Krüger, T. Ziegler, S. Näher, D. Alberts, D. Ambras, G. Koch, M. Jünger, C. Buchheim, and S. Leipert.
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In S. Whitesides, editor, *Proc. 6th Internat. Symp. on Graph Drawing (GD '98)*, volume 1547, pages 456-457, Montréal, Canada, Aug. 1998. Springer-Verlag.
18. P. Mutzel, T. Odenthal, and M. Scharbrodt.
The thickness of graphs: A survey.
Graphs and Combinatorics, 14:59-73, 1998.

19. P. Mutzel and R. Weiskircher.
Optimizing over all combinatorial embeddings of a planar graph.
Technical report, Max-Planck-Institut für Informatik, Saarbrücken, 1998.
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20. P. Mutzel and R. Weiskircher.
Two-layer planarization in graph drawing.
In K.-Y. Chwa and O. Ibarra, editors, *Algorithms and Computation, 9th International Symposium, ISAAC '98*, volume 1533 of *Lecture Notes in Computer Science*, pages 69-78, Taejon, Korea, 1998. Springer-Verlag.
21. P. Mutzel and R. Weiskircher.
Two-layer planarization in graph drawing.
In K. Y. Chwa and O. H. Ibarra, editors, *Proceedings of the Ninth Annual International Symposium on Algorithms and Computation (ISAAC '98)*, volume 1533 of *LNCS*, pages 69-79. Springer Verlag, 1998.
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22. P. Mutzel and T. Ziegler.
The constrained crossing minimization problem.
Forthcoming Technical Report, Max-Planck-Institut für Informatik, Saarbrücken, Germany, 1998.
23. G. R. Raidl.
A genetic algorithm for labeling point features.
In H. R. Arabnia, P.-C. Chung, J. B. Farison, G. R. Raidl, M. Sarfraz, and Z. Zhang, editors, *Proceedings of the International Conference on Imaging Science, Systems and Technology*, pages 189-196. CSREA Press, 1998.
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24. G. R. Raidl.
A hybrid GP approach for numerically robust symbolic regression.
In J. Koza et al., editors, *Proceedings of the 3rd Annual Genetic Programming Conference*, pages 323-328. Morgan Kaufmann, 1998.
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25. G. R. Raidl.
An improved genetic algorithm for the multiconstrained 0-1 knapsack problem.
In D. Fogel et al., editors, *Proceedings of the 5th IEEE International Conference on Evolutionary Computation*, pages 207-211. IEEE Press, 1998.
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26. G. R. Raidl and G. Kodydek.
Evolutionary optimized tensor product Bernstein polynomials versus backpropagation networks.
In *Proceedings of the International ICSC/IFAC Symposium on Neural Computation (NC'98)*, pages 885-890, Vienna, Austria, 1998.
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28. G. R. Raidl and C. Wurm.

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In J. Sarnovsky et al., editors, *Proceedings of the International Conference on Artificial Intelligence in Industry: From Theory to Practice*, pages 247-256, 1998.
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29. I. Tastl and G. R. Raidl.

Transforming an analytically defined color space to match psychophysically gained color distances.

In G. B. Beretta and R. Eschbach, editors, *Proceedings of the SPIE's 10th International Symposium on Electronic Imaging: Science and Technology*, pages 98-106, San Jose, CA, 1998.
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1997:

1. D. Alberts, C. Gutwenger, P. Mutzel, and S. Näher.

AGD-Library: A library of algorithms for graph drawing.

In G. Italiano and S. Orlando, editors, *Proceedings of the Workshop on Algorithm Engineering (WAE '97)*, 1997.
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2. R. Brockenauer.

Separierung von Kuratowski-Ungleichungen für das größte planare Untergraphenproblem.
Diplomarbeit, Universität des Saarlandes, Saarbrücken, Germany, 1997.

3. S. Fialko.

Das Planare Augmentierungsproblem.

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4. C. Gutwenger and P. Mutzel.

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5. C. Hundack, K. Mehlhorn, and H. Stamm-Wilbrandt.

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6. C. Hundack, P. Mutzel, I. Pouchkarev, and S. Thome.

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7. M. Jünger, E. Lee, P. Mutzel, and T. Odenthal.
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8. M. Jünger, S. Leipert, and P. Mutzel.
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9. M. Jünger and P. Mutzel.
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Journal of Graph Algorithms and Applications (JGAA)
(<http://www.cs.brown.edu/publications/jgaa/>), 1(1):1-25, 1997.
10. A. Kerren.
Animation der semantischen Analyse.
Master's thesis, Universität des Saarlandes, Saarbrücken, 1997.
11. G. Klau.
Quasi-orthogonales Zeichnen planarer Graphen mit wenigen Knicken.
Diplomarbeit, Max-Planck-Institut für Informatik, Saarbrücken, Germany, 1997.
12. G. W. Klau.
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Diplomarbeit, Universität des Saarlandes, Saarbrücken, Fachbereich Informatik, Technische Fakultät, Jan. 1997.
13. P. Mutzel.
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1996:

1. G. Calinescu, C. Fernandez, U. Finkler, and H. Karloff.
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In *Proc. of 7th Annual ACM-SIAM Symposium on Discrete Algorithms*, pages 16-25, 1996.
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3. M. Jünger, S. Leipert, and P. Mutzel.
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4. M. Jünger and P. Mutzel.
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6. G. Kodydek.
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7. G. Raidl.

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PhD thesis, Vienna University of Technology, Vienna, Austria, 1994.

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